Shakil Mosharrof
B.Sc in CS | AWS AI/ML Scholar | Software Engineer

+8801312361819
Dhaka,Bangladesh
shakilmrf8@gmail.com

Portfolio
GitHub
LinkedIn

SKILLS ↗

Language	Java, Python, C, C++, Solidity,Git, LaTeX, C#, Bash,PHP, JavaScript, Matlab, SQL
Frontend	HTML5, CSS, JS, Bootstrap, React
Backend	Flask, FastAPI, Redis, RQ, Celery, Django, ASP.NET Core, Node.js, React.js
Database	MySQL, Firebase, MongoDB,SQLite
ML & NLP	ML Metrics, Supervised & Unsupervised learning, LLMs, PyTorch, NLP, Tensorflow, SpaCy, T5, BERT, OpenCV, Yolo, GANN, CNN, LLM Solutions Development, Experienced with LLMs APIs(GPT-4+, Claude-2, Llama-2), Ollama, Research in Generative AI, Langchain, Streamlit, CUDA, Jupyter/Anaconda, Fine-Tuning Datasets with LLM, Prompt Engineering
Soft Skills	Proficiency in English Communication,Project Management,English (business), Bengali (business)

PROJECTS | CERTIFICATIONS ↗

MIST Mongol Barota (An autonomous rover)　　2021 - 2023
Mars Society's University Rover Challenge (URC)　　*USA*
Anatolian Rover Challenge (ARC)　　*UKET,Turkey*
Tech Stack　ROS,Robotics,ML,Autonomy,Python,Flask,R&D

Retrieval Augmented Generation Using Gemini Pro LLM and FastAPI|Github
Tech Stack　FastAPI, Gemini, LLM, RAG, API development

Pretrained CNN-based Dog Classifier |Github|Certificate
Tech Stack　Python,ResNET,VGG16, Machine Learning

NLTK LSTM Based HateSpeech Detection | Github
Tech Stack　ML, NLP, LSTM, Python

E-Mail Registration System in RESTful Way|Github
Tech Stack　REST, Flask, SQLAlchemy, PyDantic, Docker

PyTorch-Create Your Own Classifer |Github|Certificate
Tech Stack　Python, CNN, Machine Learning, AWS, Udacity

MNIST Neural Network Project using pyTorch | Github
Tech Stack　PyTorch, Python, CNN, Machine Learning

RESEARCH & PUBLICATIONS (5+) ↗ | SCHOLAR ↗

- DeepTriNet: A Tri-Level Attention Based DeepLabv3+ Architecture for Semantic Segmentation of Satellite Images.[Link] [got the best paper award]
- Performance Analysis of Various EfficientNet Based U-Net++ Architecture for Automatic Building Extraction from High Resolution Satellite Images.[Link]
- CycleGAN-Based Data Augmentation with CNN and Vision Transformers (ViT) Models for Improved Maize Leaf Disease Classification.[Link]
- Biomolecular Analysis of Soil Samples and Rock Imagery for Tracing Evidence of Life Using a Mobile Robot [Link]
- Enhancing Mango Leaf Disease Classification: ViT, BiT, and CNN-Based Models Evaluated on CycleGAN-Augmented Data.[Link]
- SecureLandChain: A Blockchain-Based Land Registry System with Biometric Authentication and Certificate Verification System [Submitted for a Q1]
- Automatic Literature Review Generation : An Improved LLM-RAG Based Solution Embedded With Regex and T5. [Thesis]

EXPERIENCE ↗

Software Engineer (AI/ML)　　**March 2024 - Now**
Gigalogy Inc.　　*Tokyo, Japan*

- Engineered scalable RESTful APIs using Flask, integrating SQLAlchemy, PyDantic, and Docker, while ensuring robust performance through Insomnia API testing.
- Designed and deployed a RAG LLM-based recommender system for a Japanese E-Commerce platform, significantly enhancing product recommendation accuracy and user engagement.

AWS AI/ML Scholar : Cohort I, II　　**Sept 2023 - Now**
Apprenticeship at AWS , Udacity　　*Remote*

- **AWS AI/ML Scholar Cohort II**: Mastered ML concepts and AWS workflows; built bike-sharing prediction and landmark classification models.
- **AWS AI/ML Scholar Cohort I**: Proficient in Python and data manipulation; developed image classification applications.

Software & Autonomous System Developer　　**2021 - 2023**
Mars Society's University Rover Challenge (URC)　　*USA*
Anatolian Rover Challenge (ARC)　　*UKET,Turkey*

- Developed an autonomous rover system with my team for URC-2021 competition **champion globally beating 88 teams**. Link.
- Upgraded the autonomous rover system for ARC-2022 competition **became third among 14 final contestant countries** .Link
- Achieved a total of 50,000+ USD fund from Government & Non-Govt Sources.
- Software & Autonomous Team Lead For URC-2023 & ARC-2023 (2nd in Asia, 5th Globally)

Industrial Trainee　　**Jan 2023 - Feb 2023**
Brainstation 23　　*Mirpur DOHS,Dhaka*

- Mastered C# and ASP.NET MVC via Brainstation 23's LMS, culminating in the development of a robust desktop application.
- Completed two ASP.NET web (REST API) projects, showcasing full-stack development skills and responsive design proficiency.

Stackoverflow ↗ |*AskUbuntu* ↗
Provided 4 solutions

- Solution links : 1　2　3　4

Competitive programming　　**2020 - Present**
- Solved over 250+ problems on GeeksForGeeks, Codeforces and Leetcode

EDUCATION ↗

B.Sc in Computer Science and Engineering
Military Institute of Science and Technology
Higher Secondary School Certificate　　**2017 - 2019**
Barishal Cadet College